



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,250	03/12/2002	Masaaki Nakamura	Q67901	1287

7590 07/20/2004  
Sughrue Mion Zinn Macpeak & Seas  
2100 Pennsylvania Avenue NW  
Washington, DC 20037-3202

EXAMINER
----------

JOHNSTONE, ADRIENNE C

ART UNIT	PAPER NUMBER
----------	--------------

1733

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/019,250

Applicant(s)

NAKAMURA ET AL.

Examiner

Adrienne C. Johnstone

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-28 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-12, 22, and 23, drawn to an organic fiber or an inorganic fiber made of a non-metallic compound wherein the fiber has a coating layer containing at least one specified metal and/or metal compound or an alloy of cobalt and at least one specified alloying element, classified in class 428, subclass 389.
  - II. Claims 13-21, drawn to a method for producing the fiber comprising dry-plating the coating layer on the fiber which is substantially non-twisted, classified in class 427, subclass 189.
  - III. Claims 24-28, drawn to a pneumatic tire comprising a rubber-fiber composite made of the fiber and a rubber composition, classified in class 152, subclass 565.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I,III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as one in which the coating layer is not dry-plated on the fiber (for example applying the coating in liquid form and then solidifying the coating).

Art Unit: 1733

3. Inventions III and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the particulars of the combination (pneumatic tire structure) show that the particulars of the subcombination are not the sole basis for patentability of the combination. The subcombination has separate utility such as fiber reinforcing other rubber composites such as hoses, drive belts, footwear, etc.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. If Invention I is elected, further elections of species are required as set forth below.

6. Claim 1 is generic to a plurality of disclosed patentably distinct species comprising an organic fiber or an inorganic fiber made of a non-metallic compound wherein the fiber has a coating layer containing at least one metal and/or metal compound selected from the group consisting of cobalt, zinc, copper, titanium, silver, nickel and compounds thereof, or an alloy of cobalt and at least one alloying element "such as" zinc, copper, chromium, titanium, nickel, silver, tungsten, tantalum and molybdenum (note that the "such as" language does not require the presence of any of the metals recited thereafter, however if applicants change the language to proper Markush format, for example -- selected from the group consisting of -- , a further election of species may be required). Applicant is required under 35 U.S.C. 121 to elect a single disclosed species (type of fiber + type of coating), even though this requirement is traversed.

Art Unit: 1733

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

7. Claims 10 and 12 are generic to a plurality of disclosed patentably distinct species comprising the organic fiber being either a polyester fiber, a polyamide fiber, a poly(vinyl alcohol) fiber, an acrylic fiber, a polyolefin fiber, a polyimide fiber, a poly(phenylene sulfide) fiber, a poly(ether ether ketone) fiber, a polybenzazole fiber, a viscose fiber, or a solvent-spun cellulose fiber and the inorganic fiber being a carbon fiber, a ceramic fiber, or a glass fiber. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

8. This application contains claims directed to the following patentably distinct species of the claimed invention: the substantially non-bundled fiber in the form of either a fiber aggregate (specification p. 15 lines 3-17) or a monofilament cord (specification p. 20 line 1 - p. 24 line 19) or short fiber (specification p. 24 line 20 - p. 27 line 12).

Art Unit: 1733

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

9. If Invention II is elected, further elections of species are required as set forth below.

10. Claim 13 is generic to a plurality of disclosed patentably distinct species comprising a method for producing an organic fiber or an inorganic fiber made of a non-metallic compound wherein the fiber has a coating layer containing at least one metal and/or metal compound selected from the group consisting of cobalt, zinc, copper,

Art Unit: 1733

titanium, silver, nickel and compounds thereof, or an alloy of cobalt and at least one alloying element "such as" zinc, copper, chromium, titanium, nickel, silver, tungsten, tantalum and molybdenum (note that the "such as" language does not require the presence of any of the metals recited thereafter, however if applicants change the language to proper Markush format, for example -- selected from the group consisting of -- , a further election of species may be required). Applicant is required under 35 U.S.C. 121 to elect a single disclosed species (type of fiber + type of coating), even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

11. This application contains claims directed to the following patentably distinct species of the claimed invention: a method for producing the fiber wherein either the coating layer is continuously formed on the fiber comprising a single filament or ten pieces or less of filaments while allowing the fiber to continuously run by pulling the fiber in its length direction and then the coated fiber undergoes no further processing (specification p. 18 lines 6-11 and p. 19 lines 6-14) or the coating layer is continuously formed on the fiber comprising a single filament or ten pieces or less of filaments while allowing the fiber to continuously run by pulling the fiber in its length direction and then the coated fiber is twisted or processed into short fibers (specification p. 18 lines 6-11 and p. 19 lines 6-14) or the coating layer is continuously formed on a plurality of the fibers spaced at intervals, each fiber comprising a single filament or ten pieces or less of

Art Unit: 1733

filaments, while allowing the fibers to continuously run by pulling the fibers in their length direction and then the coated fibers undergo no further processing (specification p. 18 lines 12-22 and p. 19 lines 6-14) or the coating layer is continuously formed on a plurality of the fibers spaced at intervals, each fiber comprising a single filament or ten pieces or less of filaments, while allowing the fibers to continuously run by pulling the fibers in their length direction and then the coated fibers are twisted or processed into short fibers (specification p. 18 lines 12-22 and p. 19 lines 6-14) or the coating layer is formed on the fiber in the form of the fiber aggregate and then the coated fiber aggregate is processed into short fibers (specification p. 15 lines 3-17 and p. 19 lines 6-14) or the coating layer is formed on one or more short fiber filaments while keeping the at least one short fiber filament moving on a stationary or running support (specification p. 18 line 29 - p. 19 line 5).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 13 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).



Art Unit: 1733

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

12. This application contains claims directed to the following patentably distinct species of the claimed invention: a method for producing the fiber wherein the dry plating is performed by either physical vapor deposition in the form of vacuum deposition or ion plating or physical deposition in the form of sputtering (specification p. 17 lines 28-30).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 13 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record

Art Unit: 1733

showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

13. If Invention III is elected, a further election of species is required as set forth below.

14. This application contains claims directed to the following patentably distinct species of the claimed invention: a pneumatic tire comprising a rubber-fiber composite made of the fiber and a rubber composition wherein either the rubber-fiber composite is a radial carcass ply and the fiber is the polyester monofilament cord specified in claim 11 (specification p. 20 line 4 - p. 24 line 14) or the rubber-fiber composite is a bead filler and the fiber is the short fiber specified in claim 12 having a length of 100 nm or less and a diameter of 0.0001 to 0.8 mm (specification p. 24 line 20 - p. 26 line 25).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are

Art Unit: 1733

added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

15. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

16. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adrienne C. Johnstone whose telephone number is (571)272-1218. The examiner can normally be reached on Monday-Friday, 10:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571)272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

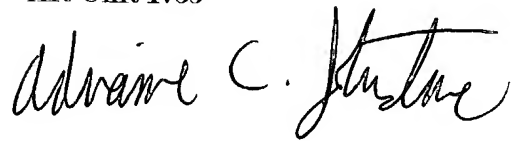
Art Unit: 1733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Adrienne C. Johnstone  
Primary Examiner  
Art Unit 1733

Adrienne Johnstone

July 14, 2004

A handwritten signature in cursive script that reads "Adrienne C. Johnstone". The signature is written in dark ink and is positioned to the right of the typed name and title.